

What is claimed is:

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1. A method of defining a user interface for a computer program, comprising:
after execution of the computer program has begun, defining a user interface
of the program by:
5 reading a function description of a first function to be provided by the user
interface;
reading an appearance description of a first appearance to be presented by the
user interface;
10 associating the function description and the appearance description on the fly
at run time; and
executing the user interface with the associated function and appearance.
 2. The method of claim 1, further comprising replacing the function description
during program execution.
 3. The method of claim 1, further comprising replacing the appearance
15 description during program execution.
 4. The method of claim 1, further comprising:
reading a map defining multiple functions to be provided by the user interface
including the first function;
reading a fashion defining all appearances to be presented by the user
20 interface including the first appearance;

associating the map and the function on the fly at run time; and

executing the user interface with the associated map and function.

5. The method of claim 1, further comprising replacing the map during program execution.

5 6. The method of claim 1, further comprising replacing the fashion during program execution.

7. The method of claim 1, wherein the map specifies that a subordinate part of the user interface is specified by a second map-fashion pair.

8. The method of claim 1, further comprising receiving events from the map component or the fashion component.

9. The method of claim 8, further comprising executing business logic associated with the respective component

10. The method of claim 1, wherein the components are stored in a database.

11. A method of defining a user interface for a computer program, comprising:
15 associating a map component and a fashion component on the fly at run time to generate the user interface; and

executing the user interface with the associated function and appearance.

12. The method of claim 11, further comprising loading a resource bundle associated with the map component.

13. The method of claim 12, further comprising locating sub-components of the user interface.

5 14. The method of claim 12, further comprising instantiating one or more sub-components of the user interface.

15. The method of claim 12, further comprising calling the fashion component to allocate a resource to each sub-component.

10 16. The method of claim 15, further comprising instructing each sub-component to present itself in the user-interface.

17. The method of claim 11, further comprising receiving events from the map component.

18. The method of claim 11, further comprising receiving events from the fashion component.

15 19. The method of claim 11, further comprising executing business logic associated with the map component

20. The method of claim 11, wherein the components are stored in a database.

21. Computer-readable medium to define a user interface for a computer program after execution of the computer program has begun, comprising instructions to:

read a function description of a first function to be provided by the user interface;

read an appearance description of a first appearance to be presented by the user interface;

5 associate the function description and the appearance description on the fly at run time; and

execute the user interface with the associated function and appearance.

22. The computer-readable medium of claim 21, further comprising instructions to replace the function description during program execution.

10 23. The computer-readable medium of claim 21, further comprising instructions to replace the appearance description during program execution.

24. The computer-readable medium of claim 21, further comprising instructions to:

15 read a map defining multiple functions to be provided by the user interface including the first function;

read a fashion defining all appearances to be presented by the user interface including the first appearance;

associate the map and the function on the fly at run time; and

executing the user interface with the associated map and function.

25. The computer-readable medium of claim 21, further comprising instructions to replace the map during program execution.

26. The computer-readable medium of claim 21, further comprising instructions to replace the fashion during program execution.

27. The computer-readable medium of claim 21, wherein the map specifies that a subordinate part of the user interface is specified by a second map-fashion pair.

28. The computer-readable medium of claim 21, further comprising instructions to receive events from the map component or the fashion component.

29. The computer-readable medium of claim 28, further comprising instructions to execute business logic associated with the respective component

30. The computer-readable medium of claim 21, wherein the components are stored in a database.

31. A computer-readable medium of defining a user interface for a computer program, comprising instructions to:

associate a map component and a fashion component on the fly at run time to generate the user interface; and

execute the user interface with the associated function and appearance.

32. A system to define a user interface for a computer program, comprising:

a processor;

a device coupled to the processor to present the user interface;

means for associating a map component and a fashion component on the fly at

5 run time to generate the user interface; and

means for executing the user interface with the associated function and

appearance.

33. The system of claim 32, wherein the device is a display.

34. The system of claim 32, wherein the device is a sound input-output device.

10 35. The system of claim 32, wherein the device is a telephone.